Transistors Panasonic

# 2SB0710A

## Silicon PNP epitaxial planar type

For general amplification Complementary to 2SD0602A

#### ■ Features

- ullet Large collector current  $I_C$
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing

### ■ Absolute Maximum Ratings $T_a = 25$ °C

Parameter	Symbol	Rating	Unit	
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	-60	V	
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	-50	V	
Emitter-base voltage (Collector open)	$V_{\mathrm{EBO}}$	-5	V	
Collector current	$I_{C}$	- 0.5	A	
Peak collector current	$I_{CP}$	-1	A	
Collector power dissipation	P <sub>C</sub>	200	mW	
Junction temperature	T <sub>j</sub>	150	°C	
Storage temperature	T <sub>stg</sub>	-55 to +150	°C	

### ■ Package

- Code
  - Mini3-G1
- Pin Name
  - 1: Base
  - 2: Emitter
  - 3: Collector
- Marking Symbol: D

## ■ Electrical Characteristics $T_a = 25$ °C±3°C

Parameter	Symbol	Conditions	Min	Тур	Max	Unit
Collector-base voltage (Emitter open)	V <sub>CBO</sub>	$I_{\rm C} = -10 \mu\text{A}, I_{\rm E} = 0$	-60			V
Collector-emitter voltage (Base open)	V <sub>CEO</sub>	$I_C = -10 \text{ mA}, I_B = 0$	-50			V
Emitter-base voltage (Collector open)	V <sub>EBO</sub>	$I_E = -10 \mu\text{A}, I_C = 0$	-5			V
Collector-base cutoff current (Emitter open)	$I_{CBO}$	$V_{CB} = -20 \text{ V}, I_E = 0$			- 0.1	μΑ
Forward current transfer ratio *1	h <sub>FE1</sub> *2	$V_{CE} = -10 \text{ V}, I_{C} = -150 \text{ mA}$	85		340	_
	h <sub>FE2</sub>	$V_{CE} = -10 \text{ V}, I_{C} = -500 \text{ mA}$	40			_
Collector-emitter saturation voltage *1	V <sub>CE(sat)</sub>	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		-0.35	-0.60	V
Base-emitter saturation voltage *1	V <sub>BE(sat)</sub>	$I_C = -300 \text{ mA}, I_B = -30 \text{ mA}$		-1.1	-1.5	V
Transition frequency	$f_T$	$V_{CB} = -10 \text{ V}, I_E = 50 \text{ mA}, f = 200 \text{ MHz}$		200		MHz
Collector output capacitance (Common base, input open circuited)	C <sub>ob</sub>	$V_{CB} = -10 \text{ V}, I_E = 0, f = 1 \text{ MHz}$		6	15	pF

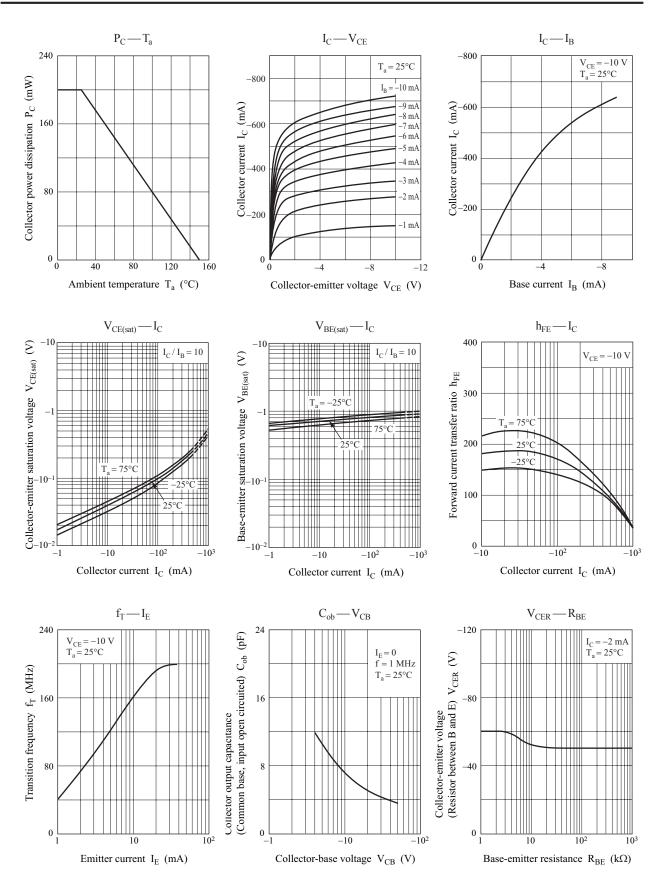
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

- 2. \*1: Pulse measurement
  - \*2: Rank classification

Rank	Q	R	S	No-rank
$h_{\mathrm{FE1}}$	85 to 170	120 to 240	170 to 340	85 to 340
Marking symbol	DQ	DR	DS	D

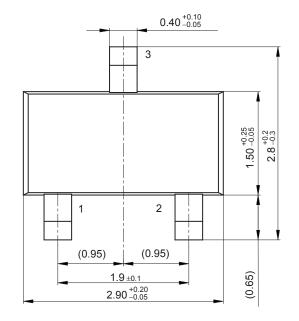
Product of no-rank is not classified and have no indication for rank.

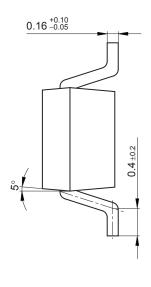
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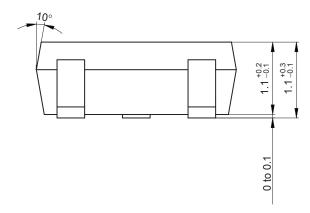


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Mini3-G1 Unit: mm







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